

## Overview

The IFS VT/VR2010 multiplexer simultaneously transmits two channels of real-time video signals over one multimode optical fiber. The modules utilize frequency modulation (FM) to reduce ghosting, jitter and cross-talk between channels, thereby providing superior video transmission. Plug-and-play design ensures ease of installation requiring no electrical or optical adjustments. The modules incorporate power and carrier detect status indicating LED's for monitoring proper system operation. The modules are available in either stand-alone or rack mount version.

## Application Examples

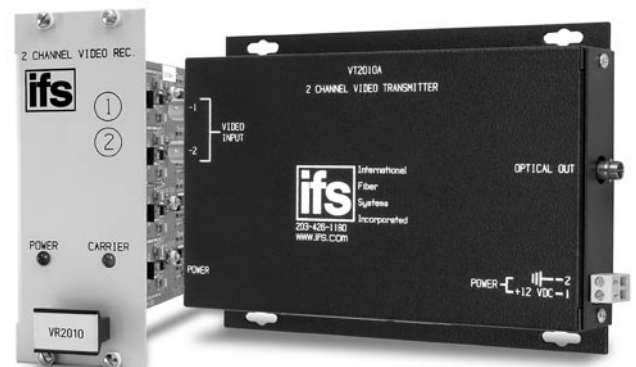
- Installations with Limited Fiber
- Retrofits/System Upgrades
- Conduit with Limited Space for Additional Cabling

## Standard Features

- FM Design
- Transmits and Receives Two Real-Time Video Signals
- 10 MHz Bandwidth Per Individual Channel
- NTSC, PAL, SECAM Compatible
- Full Color Compatibility
- Reduces Fiber/Cabling Cost
- No In-field Electrical or Optical Adjustments Required
- Power and Carrier Detect Status Indicating LED's to Monitor System Performance
- Hot-Swappable Rack Modules
- Automatic Resettable Fuses on all Power Lines
- Comprehensive Lifetime Warranty

# 2-Channel Video Multiplexer

Simultaneously transmits 2 channels of real-time video signals over one multimode optical fiber.



# GE Security

North America  
T 888-GE-SECURITY  
888-437-3287  
F 503-691-7566  
E sales@ifs.com

Asia  
T 852-2907-8108  
F 852-2142-5063

Australia and New Zealand  
T 613-9239-1200  
F 613-9239-1299

Europe  
T 44-113-238-1668  
F 44-113-253-8121

Latin America  
T 305-593-4301  
F 305-593-4300

gesecurity.com/ifs

Specifications subject to  
change without notice

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## Agency compliance



## Made in the USA

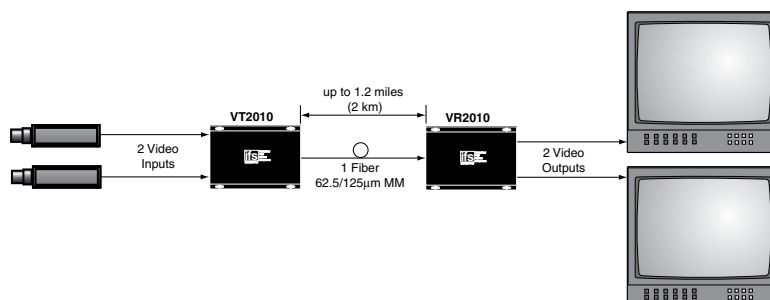
Complies with FDA Performance  
Standard for Laser Products, Title 21,  
Code of Federal Regulations, Subchapter J

## Specifications

<b>Video</b>	
Video Input:	1 volt pk-pk (75 ohms)
Bandwidth:	10 Hz - 10 MHz (typical)
Differential Gain:	<5%
Differential Phase:	<5°
Tilt:	<1%
Signal-to-Noise Ratio (SNR):	55 dB (typical)
<b>Wavelength</b>	
850 nm, Multimode	
<b>Number of fibers</b>	
1	
<b>Connectors</b>	
Optical:	ST
Power and Audio:	Terminal Block with Screw Clamps
Video:	BNC (Gold Plated Center-Pin)
<b>Electrical &amp; Mechanical</b>	
Power:	
Surface Mount:	12 VDC @ 450 mA
Rack:	From Rack
Number of Rack Slots:	2
Current Protection:	Automatic Resettable Solid-State Current Limiters
Max. RG59 Cable Length:	750 ft.
Circuit Board:	Meets IPC Standard
Size (in./cm.) (LxWxH)	
Surface Mount:	7.0 x 4.9 x 1.0 in., 17.8 x 12.5 x 2.5 cm
Rack Mount:	7.7 x 5.0 x 2.0 in., 19.6 x 12.7 x 5.1 cm
Shipping Weight:	<2 lbs./0.9 kg
<b>Environmental</b>	
MTBF:	> 100,000 hours
Operating Temp:	-40° C to +74° C
Storage Temp:	-40° C to +85° C
Relative Humidity:	0% to 95% (non-condensing)†

†May be extended to condensation conditions by adding suffix '-C' to model number for conformal coating.

## System Design



## Ordering Information

	Part Number	Description	Fibers Required	Optical Pwr. Budget	Max. Distance*
Multimode 62.5/125µm**	VT2010 VR2010	2 Channel Video Transmitter/Multiplexer (850 nm) 2 Channel Video Receiver/Demultiplexer (850 nm)	1	10 dB	1.2 miles (2 km)***
Accessories*	PS-12 VDC 12 Volt DC Plug-in Power Supply (Included) PS-12 VDC 12 Volt DC Plug-in Power Supply, 230 VAC Input (Included if specified at time of order)				
Options	Add '-R3' to Model Number for R3 Rack Mount - No Charge (Requires R3 Rack purchased separately) Add '-C' for Conformally Coated Printed Circuit Boards (Extra charge, consult factory)				

\* Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels.

Distance can also be limited by fiber bandwidth. \*\* For 50/125 Fiber, subtract 4 dB from Optical Power Budget.

\*\*\* This product may be used with 62.5µm graded index multimode fiber having a maximum run length of 2 km and/or a maximum optical loss of 10 dB.

\*All accessories are third party manufactured.



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